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RECENT CHANGES ON THE SOMERS-SANDY POINT COASTLINE, WESTERNPORT BAY, VICTORIA

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Abstract: The sandy foreland east of Somers, culminating in Sandy Point, consists of numerous sub-parallel dune ridges, the pattern of which indicates long-term accretion of sand supplied from the sea floor to the south-west, and a predominance of eastward drifting by waves and currents. Recent stages in the growth and evolution of the southern coastline of this foreland have been traced from successive air photographs, and during the past decade repeated surveys on 24 transects have demonstrated continuing erosion, and eastward drifting to accreting sectors at Cormorant Point and Sandy Point. Estimates of areal and volumetric losses and gains are presented: they show a net loss from the beach system, some of the sand being carried on to backshore dunes and some being removed offshore to the extensive bar system that runs out to Middle Bank.

In the south-west of Westernport Bay (Fig. 1) the coastline between Flinders and Somers consists of bluffs and cliffed headlands fronted by shore platforms, all cut in weathered Tertiary basalt. Sandy beaches, backed by low grassy dunes, occupy successive embayments, narrowing as they pass the rocky headlands. At Balnarring, scrub-covered dunes behind the beach are backed by the channel of Merricks Creek, which runs eastwards to enter the sea in the lee of a group of rocky reefs exposed at low tide. At Somers, to the east, the sandy beach and backing dunes run behind a broad shore platform, and are backed in turn by steep bluffs. East of Somers the bluffs curve inland and the shore platform comes to an end, but the sandy beach continues, backed by extensive dune topography, for another 5 km to Sandy Point. Off this point, sand bars and shoals, partly exposed at low tide, run out south-west to Middle Bank, and between these and the sandy beach seagrass beds are extensive in coastal waters.

The Somers-Sandy Point beach system (Fig. 2) forms the southern flank of a large sandy depositional foreland, bearing numerous sub-parallel dune ridges (Jenkin 1962). The beach, 50 to 70 m wide at low spring tides, consists mainly of fine to medium quartzose sand, with some coarser material, including pebbles of calcareous sandstone similar to the dune calcarenites which occur along the Victorian coastline at several locations, notably the Nepean Peninsula at the entrance to Port Phillip Bay to the west. There are also a few pebbles of basalt, derived from erosion of the shore platform at Somers. Parts of this beach have recently been cut back by marine erosion, and the dunes to the rear are cliffed (Fig. 3), but others have been built up by sand accretion, and are backed by low, grassy dunes (Fig. 4).

Historical changes on this coastline have been documented with references to maps, charts, air photographs and ground photographs (Figures 5 and 6) of various dates, supplemented during the past decade by repeated surveys of the beach. Before considering these, it is necessary to describe the processes at work on the shore and in the nearshore zone along the Somers-Sandy Point beach.

PROCESSES

Mean spring tide range on the coast between Balnarring and Sandy Point is about 2.5 m, increasing to just over 3 m at maximum spring tides and diminishing to about 2 m at neap tides. High tide arrives at Balnarring Pier 5 to 15 min after Flinders, and reaches Sandy Point another 5 to 10 min later.

As the tide rises an eastward current develops off the coast between Point Leo and Balnarring, moving inshore along the Somers-Sandy Point beach. The relationship between mean spring tide and nearshore currents east of Somers on a windless day is shown in Fig. 7. Maximum current velocity occurs about 1.5 hr after mid-tide. Flow velocities of up to 80 $cm.sec.^{-1}$ (about 1.6 knots) have been recorded here on calm days at maximum tides.

As the tide ebbs a strong outflow develops off Sandy Point, splaying out south-westwards over Middle Bank (Fig. 1), but inshore there is only a weak westward ebb towards Somers, rarely attaining 25 $cm.sec.^{-1}$.

Ocean swell enters Westernport Bay between Flinders and Phillip Island from a southerly direction, but is much weakened as it passes through the shallow water. Refracted ocean swell (wave periods typically 8 to 14 sec) frequently reaches the shore between Point Leo and Balnarring, and has shaped beaches with gently-curved 'swash alignments' (Davies 1972). East of Balnarring these swell waves diminish because of the sheltering effect of Middle Bank. They can sometimes be detected on the shore between Somers and Sandy Point at high tide, particularly when they are reinforced by strong southerly winds, but as the tide falls the ocean waves break heavily on Middle Bank, and at low tide they do not penetrate the nearshore waters.

Wave action is also generated by local winds, which produce short period (3 to 6 sec) waves, arriving mainly

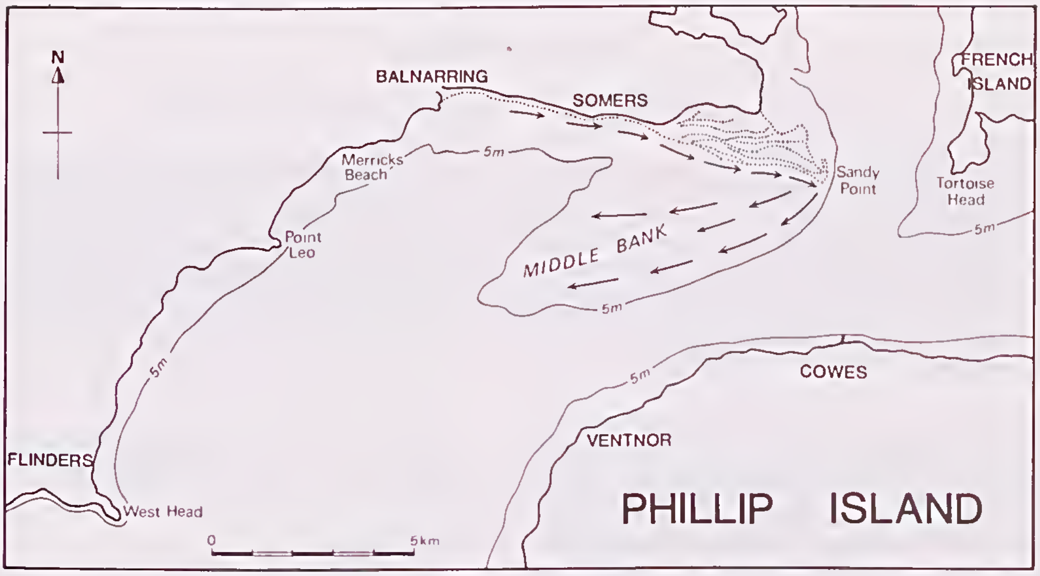


Fig. 1—Coastal features in the south-west of Westernport Bay, showing the location and outline of Sandy Point. Arrows indicate the predominant eastward longshore drifting (resulting from the approach of south-westerly waves and a strong flow current inshore as the tide rises) to Sandy Point, and the movement of sand from there (dispersed by ebb currents as the tide falls) to Middle Bank.

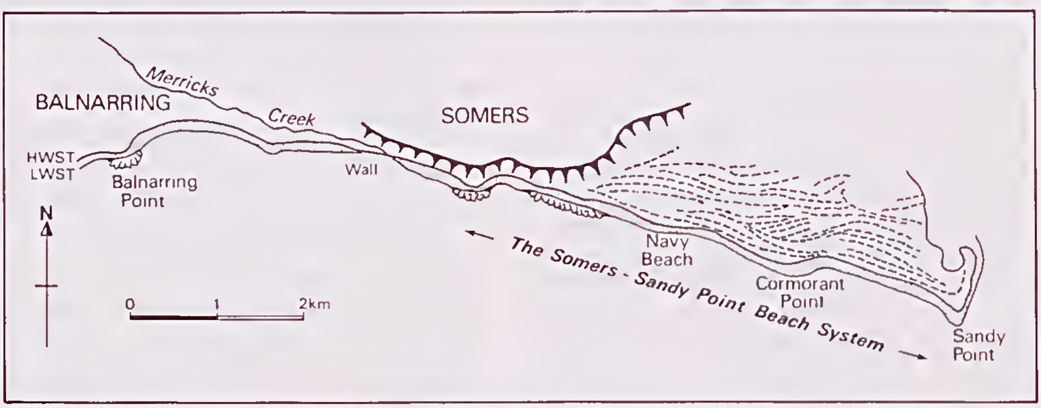


Fig. 2—The Somers-Sandy Point beach system in relation to the bluffs and shore platforms cut in Tertiary basalt at Somers, and the sandy depositional foreland, on which dotted lines indicate predominant trends of foredunes.

Fig. 3—Retreating sector of coastline east of Somers in October 1969. Erosion at the base of the dune cliff by storm waves at high tide has undercut tea-tree (*Leptospermum laevigatum*) woodland. Photo: Eric Bird.

Fig. 4—Advancing sector of coastline east of Cormorant Point, looking towards Sandy Point, 7 December 1984. Behind the driftwood zone on the right are sand hummocks developing under *Cakile maritima*, and in the foreground the sand has been colonised by marram grass (*Ammophila arenaria*). Photo: Eric Bird.

Fig. 5—A view of the coastline east of Somers, taken by J.T. Jutson on 10 December 1933. A note on the back of the photograph describes it as "just about where the basalt country falls away and gives place to a peninsula of blown sand". Fig. 6 shows the same sector as it appeared in December 1979. Photo: Geological Survey of Victoria.

from the south-western quadrant, but occasionally from the south-east, notably when an anticyclone is moving into this region from the south-west. At Balnarring the waves coming from the south-west are small, because of the short fetch and the sheltering effect of the hilly hinterland of the Mornington Peninsula, but farther east they increase in relative height and, arriving obliquely, produce an eastward beach drifting. The same waves generate a longshore current eastward to Sandy Point, which augments the tidal flow current, but opposes the weaker inshore ebb. It is difficult to measure longshore currents when strong south-westerly waves accompany a rising tide because of the pulsations of wave action, but it is likely that east of Somers they exceed 1.0 m.sec.$^{-1}$. At low tide, wave action is diminished because the nearshore waters are relatively shallow, and the dense seagrass communities absorb much of the wave energy.

The prevailing winds are from the west, and these also contribute to the predominance of eastward drifting of sand between Somers and Sandy Point, especially when they blow strongly, and carry dry beach sand alongshore: the process is similar to that described from Portsea Beach by So (1982). Occasional south-easterly winds may temporarily reverse this aeolian drifting.

In contrast with the beaches south-west of Balnarring, the Somers-Sandy Pont coastline has a 'drift alignment' (Davies 1972). Eastward drifting has deflected the mouth of Merricks Creek towards Somers, and a succession of lobate sandy forelands has formed, and migrated along the shore towards Sandy Point. In the nearshore zone near Sandy Point Marsden, Mallett and Donaldson (1979) noted large sand bars at right-angles to the coastline, driven eastward by the rising tide. Farther offshore, the bars and shoals that run out south-west from Sandy Point to Middle Bank consist of sand deposited by ebb currents. The underwater topography has been shaped partly by ocean waves breaking on the southern margin of Middle Bank, and partly by interacting waves and currents in nearshore waters as the tides rise and fall. The seagrass beds extensive to the west of these bars and shoals, dominated by *Zostera* spp. and *Amphibolis* sp., are quiet environments within which fine to very fine sand and silt have been deposited. Sand bars migrating eastwards inshore bury and destroy seagrass vegetation, but it revives after they move on. Observations of sand bar migration during the past decade here showed little evidence of shoreward movement, except briefly during occasional periods of south-easterly wave action, when

Fig. 6—The coastline east of Somers, as it appeared on 19 December 1979, with Ports & Harbors' Pole No. 15 in the foreground, and No. 16 in the middle distance. The wooden wall on the left was completed in 1978. Compare Fig. 5.

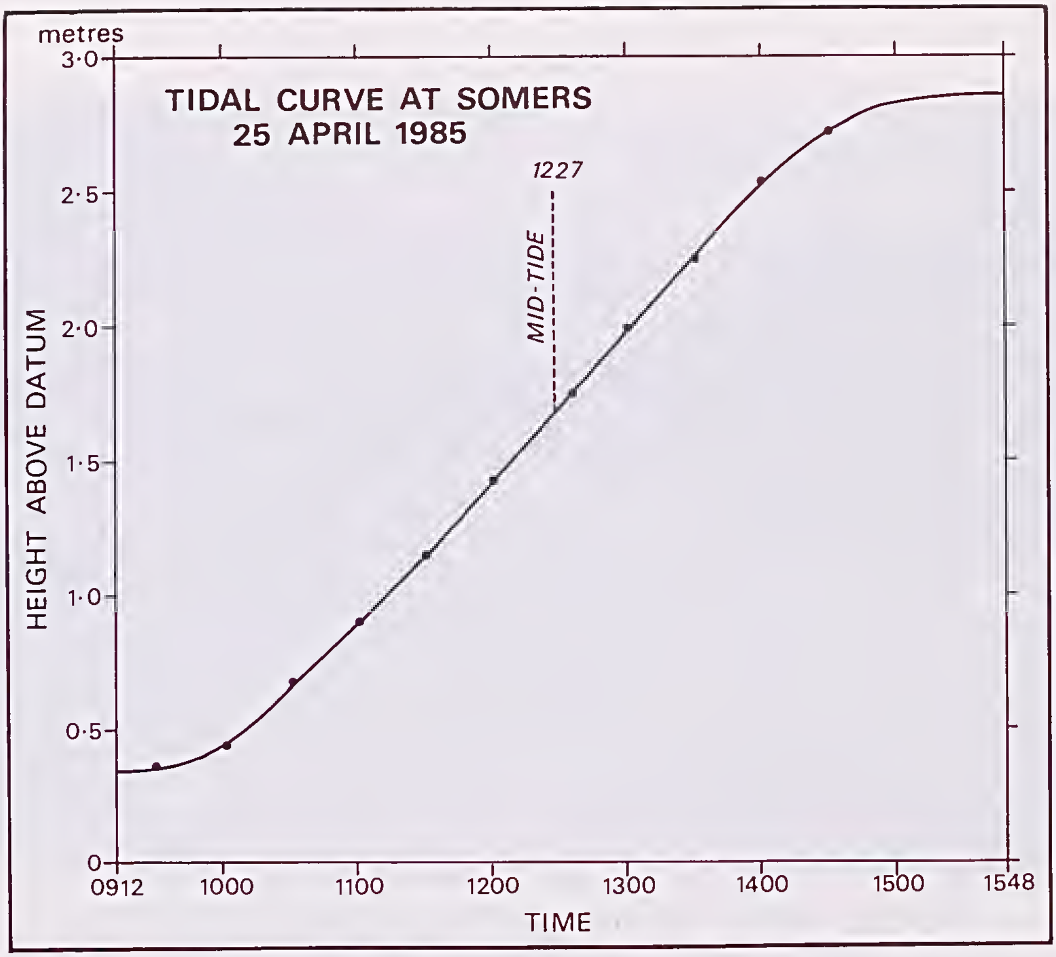
some sand from the bars off Sandy Point has been delivered to the beach. While it is possible that sand swept out to Middle Bank by ebb currents could eventually find its way back on to the Somers-Sandy Point beach, this has not been happening in recent years.

THE SANDY FORELAND

The pattern of dune ridges on the sandy foreland east of Somers is visible on air photographs (Fig. 10), and has been mapped by Jenkin (1962). The area is Commonwealth Land, under the control of the Royal Australian Navy Flinders Depot (H.M.A.S. *Cerberus*). It was first described by the French explorer Dumont D'Urville (1833), who landed on Sandy Point during a visit to Westernport Bay in the *Astrolabe* in November 1826, and walked inland across parallel ridges and swales so regular that he found it difficult to believe they were not man-made. The ridges have an amplitude of up to 3 m, and soil profiles beneath the ridge crests increase in depth landwards, indicating that they formed successively on a prograding sandy coast. The oldest (i.e. innermost) carry *Eucalyptus* woodland with an understorey of bracken and some heath plants. This gives place seaward to *Banksia integrifolia* woodland, then *Leptospermum laevigatum* (coast tea-tree) woodland, declining to scrub and grassy vegetation on the youngest dunes, immediately behind the beach. The soil profiles and vegetation associations are similar to those described from the sand ridges of the outer barrier in East Gippsland, behind the Ninety Mile Beach (Bird 1978), and are considered to be of Holocene age, but it is possible that there is older (i.e. Pleistocene) sandy terrain farther inland.

The sandy foreland has thus been deposited in the period since the Holocene marine transgression brought the sea up to approximately its present level about 6,000 years ago, establishing the general outlines of Westernport Bay (Marsden & Mallett 1975). At this stage the coastline east of Somers consisted of cliffs behind shore platforms cut in Tertiary basalt, but soon the deposition of sand began.

The sand is quartzose, with associated calcareous material. It cannot have come from the Tertiary basalts, which weather subaerially into clay, and are eroded on cliffs and shore platforms into cobbles, pebbles, and a little sand, added to nearby beaches. This sand is black, and mineralogically distinct from the beach and dune sands east of Somers. In the absence of a local fluvial sand supply (Merricks Creek delivers only small quantities of silt and clay) the sand must have come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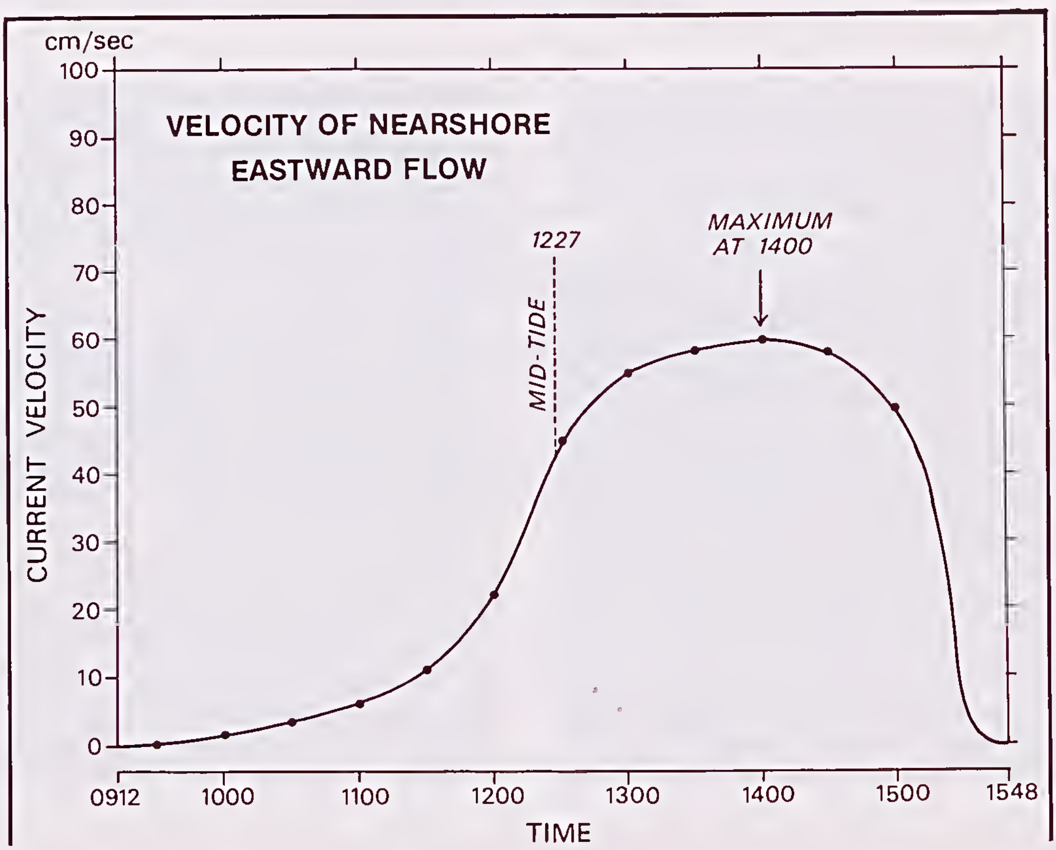
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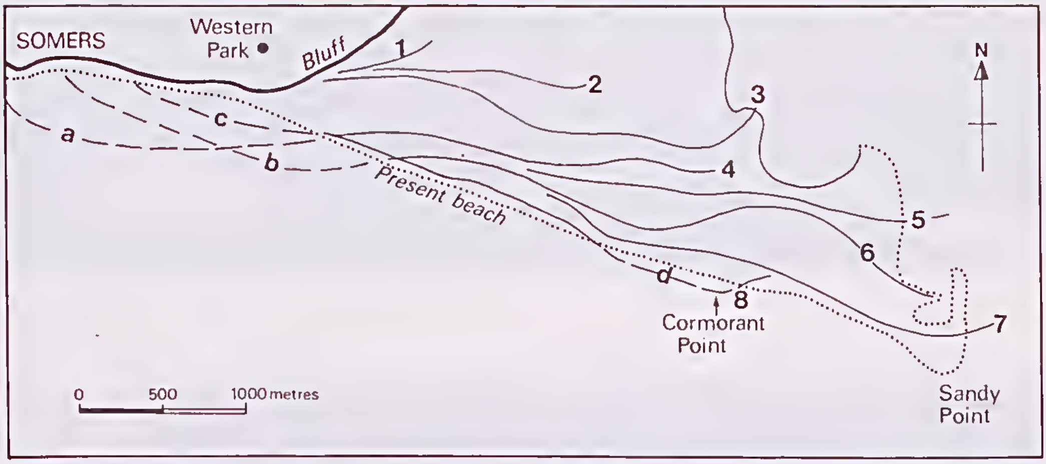


Fig. 8—Stages (1 to 8) in the evolution of the sandy foreland east of Somers, deduced from selected dune ridge alignments. For explanation see text. The dotted line indicates the present configuration.

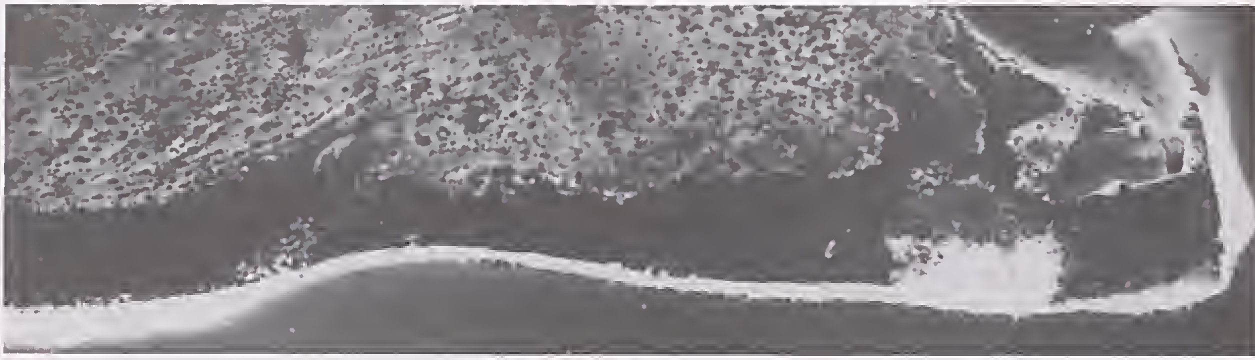
Fig. 9—A view west from Sandy Point towards Cormorant Point, showing the relict (1939) coastline on the right, and a foredune, initiated on a wave-built beach ridge in 1974 and subsequently built up by the trapping of wind-blown sand in marram grass (*Ammophila arenaria*), separated from the earlier coastline by an unvegetated swale. Photo: Eric Bird.

from the sea floor to the south and south-west. It is deduced that, as the Holocene marine transgression came to an end, sand shoals formed in the sea area between Flinders and Phillip Island, and were carried shoreward by wave action to be deposited as beaches along the bordering coasts. Much of the sand delivered to the coastline between Balnarring and Somers has drifted eastwards to be incorporated in the sandy foreland. It is possible that progradation here was assisted by a slight emergence following an episode of sea level 1 to 2 m higher than at present as the marine transgression came to an end, for there is evidence for such an episode at several places around Westernport Bay (Marsden & Mallett 1975).

The numerous sub-parallel ridges are evidently relict foredunes, each formed in the zone behind a prograding sandy beach, and each commemorating an earlier position of the coastline. The various ways in which such foredunes are initiated has been the subject of recent discussion (Hesp 1984, Bird 1985a), but it is generally agreed that they indicate stages in an evolving coastal configuration.

Stages in the growth of this sandy foreland may be deciphered from the dune ridge pattern (Fig. 8). At stage 1, a beach formed in front of the bluff at Western Park, and at stage 2, a ridge developed in front of this, and extended further eastwards: the intervening hollow is occupied by a swamp. With further sand accretion,

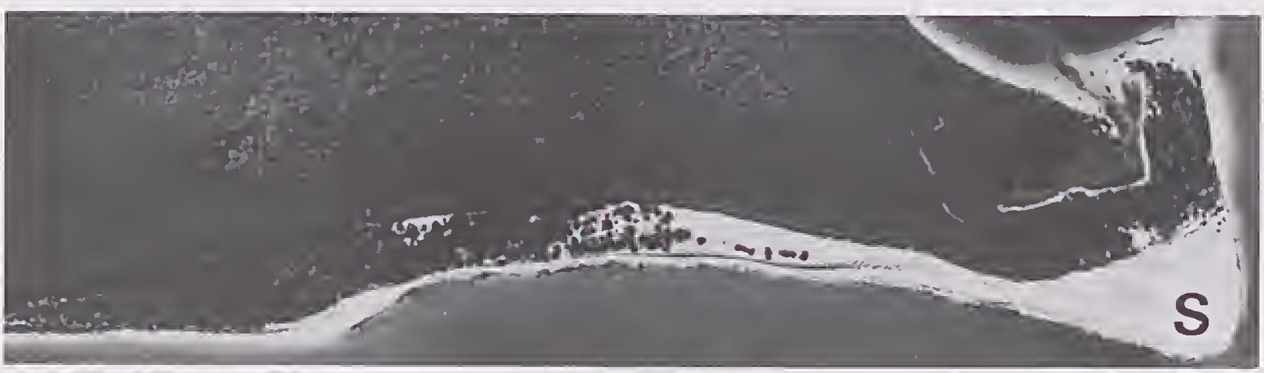
Fig. 7—Measurements of the rising tide and nearshore eastward current flow measured 10 metres offshore at Pole 21, east of Somers (see Fig. 14).



1 April 1939

3 April 1956

16 January 1968



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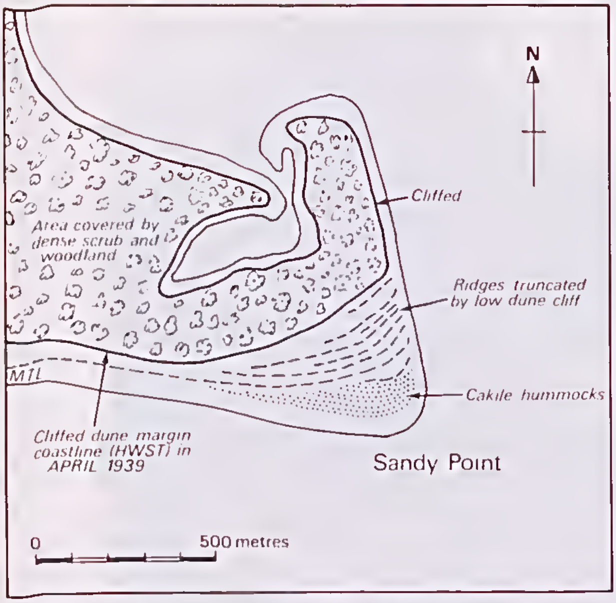

Fig. 11—The outline of Sandy Point (January 1985), showing the extent of progradation since April 1939. The pecked lines indicate foredunes formed successively between 1939 and 1975, and the dotted area hummocks with *Cakile maritima* on sandy terrain added since 1975.

stage 2 was outflanked and extended as a recurved spit (stage 3). By stage 4, there had been progradation south of Somers (a in Fig. 8), forming a lobe which has since been cut away by erosion. Stage 5 was marked by further eastward growth, subsequently truncated by erosion of the eastern shore, where receding cliffs are undermining dune woodland. By stage 6 the coastline had become markedly sinuous, and included a lobe south of Western Park (b in Fig. 8), which has also since been removed, Stage 7 saw a further outgrowth, bringing the coastline to approximately the configuration found by European explorers.

The outline of Sandy Point was first shown on a sketch-map drawn by George Bass when he discovered Western Port in 1798. Slightly different versions appear on charts compiled subsequently by Flinders in 1799, Barrallier in 1801, Faure in 1802, D'Urville in 1826 and Weatherall in 1827, but it is doubtful if the discrepancies indicate actual changes of the coastline, for none of these charts was based on detailed surveys. The first map based on triangulation, by Smythe in 1842, showed an almost straight, slightly sinuous coastline like that of stage 7, and similar outlines appeared on charts produced by Stokes in 1843 and Cox in 1865.

Stage 8, attained early in the present century, included two small lobes (c and d in Fig. 8), which can be seen on air photographs taken in 1939. These have since moved eastward (c to the grassy sector at Navy Beach, and d to Cormorant Point). By 1939 the coastline extending 1 km west from Sandy Point had been cut back to form a prominent dune cliff, which is still clearly traceable behind the more recent dunes east of Cormorant Point (Fig. 9).

Air photographs taken in 1939, 1956, 1968 and 1984 (Fig. 10) can be used to trace subsequent changes. At Cormorant Point (C) erosion of the southern flank has been accompanied by accretion and successive dune ridge formation on the eastern flank, and at Sandy Point (S) there has been rapid progradation (Fig. 11), especially since 1972, forming a broad cuspate feature on the southern shore (Figures 12 and 13). The eastern shore has changed little, because of the strong ebb currents, which have inhibited eastward growth. Between 1956 and 1968 there was some progradation here, with the development of grassy dunes, but these have been cut away in the past few years, the sand having drifted both northwards (to widen and extend the spit that curves into the salt marsh basin behind Sandy Point) and southwards (to the bars and shoal that run south-west to Middle Bank).

Fig. 12—An oblique aerial view of Sandy Point (S) looking west to Cormorant Point (C), on 1 October 1972. Comparison with Fig. 13 will indicate that progradation has subsequently occurred on the southern shore of Sandy Point, and that the eastern shore has been cut back. Photo: Neville Rosengren.

Fig. 10—Changes in the coastline at Sandy Point (S) and Cormorant Point (C) shown on successive air photographs (Crown Copyright Reserved).

Fig. 13—An oblique aerial view of Sandy Point (S) looking west towards Cormorant Point (C), with Somers in the distance, 15 February 1984. Note the new foredunes on the recently-prograded area on the southern shore of Sandy Point. Photo: Neville Rosengren.

CHANGES SINCE 1975

Field observations of changes along the Somers-Sandy Point coastline were initiated by the author in 1966, with mapping of the extent of receding coastline (beach backed by cliffed dunes) and advancing coastline (beach backed by incipient foredunes). Erosion has been prevalent over the ensuing period, except on sectors at Navy Beach, Cormorant Point, and Sandy Point (Fig. 2) where accretion of sand has taken place.

In January 1975, a series of 24 transects was established between Somers and Sandy Point in order to measure rates of change (Fig. 14). Fixed datum posts were inserted a short distance inland, and repeated surveys from these were used to measure the advance or retreat of the coastline. On advancing sectors the coastline was taken as the seaward limit of dune vegetation, and on retreating sectors the base of the dune cliff was used: both are roughly equivalent to the limit of the highest spring tides. The surveys, using level and staff, ran out to the low spring tide line.

The January 1985 surveys of these 24 transects were compared with profiles recorded a decade previously to show the extent of coastline advance or retreat. Cross-sectional areas measured on adjacent transects were averaged, and multiplied by the intervening distance to give an estimate of the volume of sand gained or lost over this period. The results are summarised in Table 1.

In 1976, the Division of Ports and Harbors (Public Works Department) inserted a series of poles along the shore at Somers (Fig. 6) to monitor beach changes there. With reference to these poles, it has been observed that Balnarring Beach has subsequently prograded, that the sector between the mouth of Merricks Creek and Somers Point has been cut back, that the bay

TABLE 1

CHANGES ON THE SOMERS-SANDY POINT COASTLINE, 1975-1985.

Transect	Advance or Retreat (m)	Cross-Sectional Area (m²)	Compartment	Mean Advance or Retreat (m)	Mean Cross-Sectional Area (m²)	Width (m)	Area gain or loss (m²)	Volume gain or loss (m³)
A	−3.2	−1.8	AB	−8.4	−11.1	225	−1890	−2498
B	−13.6	−20.4	BC	−12.05	−24.45	225	−2711	−5501
C	−10.5	−28.5	CD	−15.3	−54.25	225	−3443	−12206
D	−20.1	−80.4	DE	−20.75	−102.2	225	−4669	−22995
E	−21.4	−124.0	EF	−16.3	−90.1	225	−3668	−20273
F	−11.2	−56.2	FG	−7.35	−30.9	225	−1654	−6953
G	−3.5	−5.6	GH	−3.25	−3.6	225	−731	−810
H	−3.0	−1.6	HI	−3.75	−5.0	225	−844	−1125
I	−4.5	−8.4	IJ	−6.0	−15.85	225	−1350	−3566
J	−7.5	−23.3	JK	−6.75	−22.7	225	−1519	−5198
K	−6.0	−22.2	KL	−4.0	−13.8	225	−900	−3105
L	−2.0	−5.4	LM	−3.55	−10.5	225	−799	−2363
M	−5.1	−15.6	MN	−4.3	−12.85	225	−968	−2891
N	−3.5	−10.1	NO	−2.3	−6.4	225	−518	−1440
O	−1.1	−2.7	OP	+2.6	+15.15	225	+585	+3409
P	+6.2	+33.0	PQ	+12.75	+49.75	225	+2869	+11194
Q	+19.3	+66.5	QR	+8.65	+31.15	225	+1946	+7009
R	−2.0	−4.2	RS	−2.9	−5.2	225	−653	−1170
S	−3.8	−6.2	ST	−3.5	−15.7	225	−788	−3533
T	−3.2	−25.2	TU	+7.15	+8.75	225	+1609	+1969
U	+17.5	+42.7	UV	+28.3	+39.65	225	+6368	+8921
V	+39.2	+36.6	VW	+40.9	+82.5	225	+9203	+18563
W	+42.6	+128.4	WX	+48.95	+135.2	120	+5874	+16224
X	+55.3	+142.0	XY*	—	—	—	+5461	+16385
						Balance	+6810	−11863

*Addition to cover new area east of transect X

	AREA (m²)		VOLUME (m³)	
Total losses A-O	−25664		−90834	
Total losses R-T	−1441		−4703	
	−27105		−95537	
Total gains O-R	+5400		+21612	
Total gains T-X	+23054	+28515	+45677	+62062
Added for XY	+5461		+16385	
	+33915		+83674	
BALANCE	+6810		−11863	

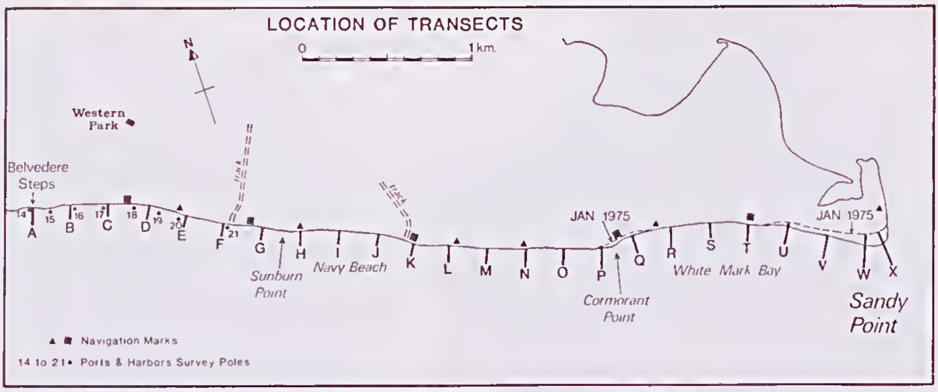

Fig. 14—Location of surveyed transects (A to X) on the Somers-Sandy Point beach, used in the preparation of Table 1. Positions of Ports & Harbors' poles (15 to 21) are also shown. The pecked line indicates the 1975 coastline at Cormorant Point and Sandy Point.

immediately east of Somers Point has shown minor backshore accretion, and that the dune cliff east of Belvedere Steps has retreated rapidly. In the latter sector, Ports and Harbors poles 15 to 21 cover almost the same stretch of beach as transects A to F in the author's survey, and measurements from these have shown similar rates of coastline recession.

Before analysing the results of the survey between Somers and Sandy Point (Table 1), some limitations are noted. The transects extended only to the low spring tide line, so that any gains or losses seaward of this line are not included. The input of eastward drifting sand to the surveyed area past transect A during the decade was not assessed, but was probably small because this was a period of accretion in the bay to the west. In places where the orientation of the coastline changed during the decade as the result of erosion or accretion, the transects did not remain orthogonal to the beach. On the foreland at Sandy Point the changes were so great that a supplementary survey was necessary to calculate the area and volume of accretion, in order to complete Table 1. In view of these limitations, the results obtained are considered to be only a general indication of the scale of changes that occurred here during the period 1975-1985.

The results show that the coastline retreated by up to 21.4 m on eroding sectors, and advanced by up to 55.3 m on accreting sectors, over this decade. On a beach 5.07 km long, an area of 2.7 ha of sandy terrain had been lost by erosion, and almost 3.4 ha gained by deposition. Erosion was most extensive on the 3.15 km sector east of Somers, and although there were limited sectors of temporary accretion (notably at Navy Beach) the only sustained accretion was at Cormorant Point and Sandy Point. The newly-deposited land is generally lower in elevation than the preceding land, removed by erosion.

In volumetric terms the sand removed from eroded sectors totalled about 95,500 m^3, and the sand added to prograded sectors about 83,700 m^3. The balance of about 11,800 m^3 lost from the Somers-Sandy Point beach system over this decade included sand blown from the beach to backshore dunes behind the 1975 coastline; sand carried round Sandy Point to be deposited on the small spit to the north; and sand swept offshore by wave scour, and especially by ebb currents at Sandy Point. It appears that much of the lost sand has been carried out on to the bars and shoals south-west of Sandy Point.

Progradation on Sandy Point between January 1975 and January 1985 resulted from deposition of about 62,000 m^3 of sand, largely supplied by eastward longshore drifting, although a small amount was brought onshore from the adjacent shoals during brief periods of south-easterly wave action. The large volume of accretion here greatly exceeds the losses in the bay immediately to the west (compartments RS and ST), so that much of the sand has come alongshore from eroding sectors west of Cormorant Point. It is deduced that mean net longshore drifting of sand eastwards to Sandy Point has been at least 6,000 $m^3.y^{-1}$.

In the course of these surveys, it was noted that erosion took place mainly during stormy periods, especially when strong wave action from the south-west accompanied a high spring tide. Under these conditions, waves attacked the base of the dune cliff, undermining grass tussocks, shrubs and trees. Erosion was particularly severe in the winter of 1981 (Power 1982). One storm, in June 1981, resulted in nearly 2 m of cliff recession on transect E in a single day. After such an event, the dune cliff is almost vertical and the beach profile smooth and evenly sloping down to the low spring tide line (Fig. 15, E), beyond which sand bars may be seen in the nearshore zone; but these are soon swept away to the east by longshore currents. It was observed that dune cliff recession was accompanied by lowering of the beach face, so that the profile as a whole moved landward, the retreat of the high spring tide line being matched by landward movement of the low spring

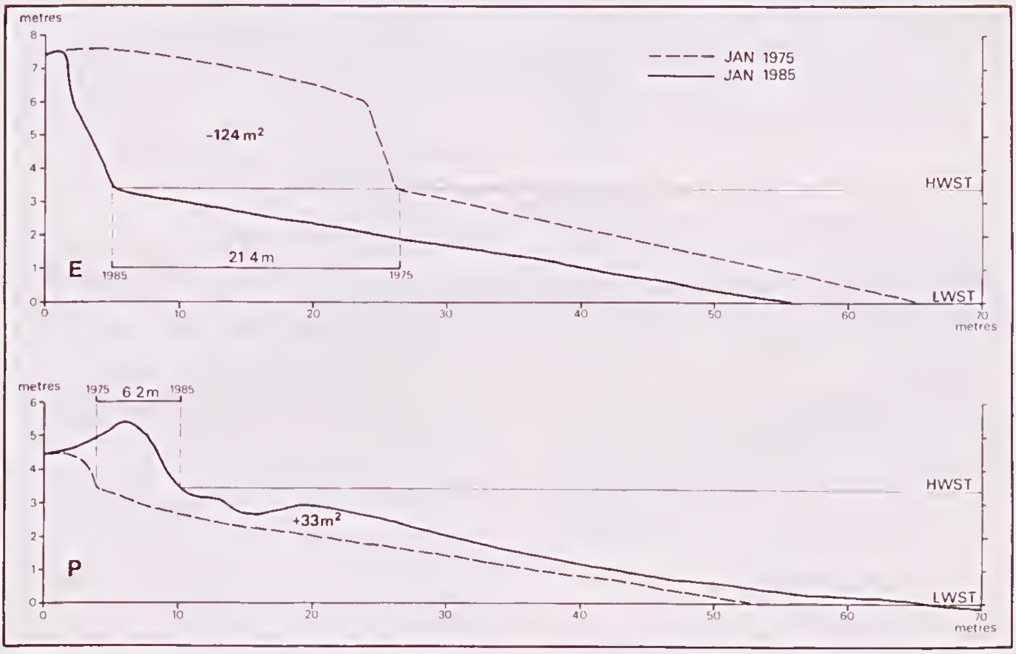

Fig. 15—Profiles on Transects E and P (for location see Fig. 14) in January 1975 and January 1985. Profiles at Transect E are typical of receding sectors, and those at Transect P of prograding sectors. The extent of advance or retreat is shown, together with cross-sectional areas between profiles, measured above low spring-tide level.

tide line. Off Navy Beach the presence of steep-sided, flat-topped residual sand banks bearing seagrass vegetation indicates that the nearshore sea floor may also have been dissected and lowered here.

Where progradation occurred, notably on the eastern flank of Cormorant Point and the southern shore of Sandy Point, the backshore showed incipient dune ridges and hummocks bearing *Cakile maritima, Spinifex hirsutus,* and marram grass (*Ammophila arenaria*): the latter became more extensive after it was planted on the dunes near Cormorant Point in the early nineteen-seventies, and in 1974 it colonised a beach ridge built by wave action east from Cormorant Point, thereafter trapping sand to build up a foredune which is now 2 to 3 m high (Bird 1985a: Fig. 2). On Sandy Point this prominent foredune marks the position of the backshore on the January 1975 coastline (Fig. 9).

On prograded sectors the upper beach, fronting foredunes, has an undulating topography, with layers of seagrass litter incorporated in the sand, which is loose and soft in texture, while the beach profile as a whole is gently-convex upward (Fig. 15, P). Beach accretion occurred mainly in the summer months, particularly when south-easterly winds were prevalent, generating waves which moved sand on to the shore, and winnowed dried beach sand to the backshore.

PREDICTIONS

On the basis of this ten-year survey, it is evident that losses from the Somers-Sandy Point beach system have exceeded gains. If this trend continues, a broad bay will be cut into the sandy foreland east of Somers, and sand eroded from this bay will drift eastwards, and be deposited on a growing foreland south from Sandy Point. It is possible that this evolution will be complicated by the development and eastward migration of further sand lobes: the backshore accretion in the bay east of Somers Point (South Beach Road) in the past decade may be a prelude to this.

Although it is possible that sand now in the bars and shoals extending from Sandy Point south-west to Middle Bank may eventually move back on to the shore, there has been no evidence of this in the past decade. The Somers-Sandy Point beach system has shown a prevalence of erosion during this period, consistent with the demonstrated modern trend on the world's sandy coastlines (Bird 1985b). In the next phase of research it is hoped that more detailed investigation of the nearshore and offshore morphodynamics in the south-west of Westernport Bay will elucidate the long-term future of the Somers-Sandy Point beach.

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